

Chapter 5. ANALYSIS OF ALTERNATIVES

An analysis of the potential environmental impacts of the three alternatives described in Section 2.4 is provided in Chapter 6 of the Final Environmental Document (FED). The three commercial harvest alternatives were selected for consideration by the Commission based on the Department's recommendation, public comment received during the normal review process, or in response to the NOP. These alternatives were selected to provide the Commission with a range of commercial harvest alternatives. The two commercial harvest alternatives contain common elements with only selected elements of the management framework considered as alternatives. A "no project" (no commercial harvest of herring within California state waters) alternative is also provided.

5.1 Alternative 1 (no project)

The "no project" alternative would eliminate the commercial harvest of Pacific herring resources within California waters. Selection of this alternative would be expected to: (1) reduce total mortality and allow herring stocks to increase to carrying capacity; (2) reduce the health of stocks through density dependent competition between individual herring; (3) increase competition between species (e.g., sardines and anchovies) occupying the same ecological niche as Pacific herring and reduce standing crops of these species; (4) increase the availability of herring to predators by reducing search effort and increasing capture success; (5) eliminate the ethical concern of those opposed to the commercial harvest of herring and the scientific information on herring derived from sampling the commercial harvest; and (6) eliminate revenues to local and regional economies, and State and Federal agencies derived from the commercial harvest of herring.

Localized, short-term, and less than significant impacts to traffic circulation, water quality, air quality, housing, utilities, scenic quality, recreational opportunities, and noise levels would also be eliminated under the no project alternative. Section 6.1 of the FED provides a full analysis of the potential impacts associated with this alternative.

5.2 Alternative 2 (no change)

Existing regulations, adopted in 2004, were for the 2004-05 Pacific herring commercial fishing season. These regulations reflect the amendments as adopted by the Commission in August 2004. Under alternative 2, the only changes to the 2005-06 regulations would be to revise the herring fishing seasons, by location, and adjust quotas to reflect the 2004-05 biomass estimates determined by the Department. In most regards, the environmental impacts of alternative 2 will be similar to those of the proposed project. However, alternative 2 does not address problems or conditions that are addressed by the proposed project. Some of the changes and amendments in the proposed project address gear measurement, weekend fishing in Tomales Bay, the reduction of minimum mesh size in San Francisco Bay to 2-in., changes in the permitting process, eligibility for a permit, reduction of the transfer fee, or are simply clarification changes and are without apparent environmental implications.

5.3 Alternative 3 (individual vessel quota)

This alternative modifies alternative 2 by establishing individual boat quotas for the roe herring gill net fishery in San Francisco Bay. Localized, short-term, and less than significant impacts of this alternative to circulation of traffic, water quality, air quality, housing, utilities, scenic quality, recreational opportunities, and noise levels are expected to be comparable to the proposed project. However, fishing effort could extend further into the season since the economic incentive would direct effort toward higher roe counts rather than quantity. Without individual boat quotas, overall quotas have typically been met long before season closure. Having the latitude to strive for higher roe counts could add incrementally to the potential impacts associated with the fishery. Section 6.3 of the FED provides further analysis of the potential environmental impacts of this alternative.